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WISCONSIN GEOLOGICAL AND

NATURAL HISTORY SURVEY.

E. A. BIRGE, Director.

HYDROGRAPHIC MAP

OF

BIG CEDAR LAKE,

WASHINGTON COUNTY, WIS.

Survey in Charge of L. S. Smith.

MADISON, WIS.

1901.

NO. 9.

PHILOSOPHICAL SOCIETY
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GEOLOGICAL SURVEY

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Explanation of Map.

THIS MAP shows by means of contour lines and tints the depth of the water in Big Cedar Lake. Numerous lines of soundings were made in the lake and the position of each sounding was carefully determined. The outline of the lake was also accurately surveyed. The position of the important soundings is indicated on the map by means of black dots. The outline of the lake indicates the outline of the water at its level in 1899. The line marked "10" indicates the ten foot level and is drawn through the points where the water had a depth of 10 feet. It shows also what the outline of the lake would be if the water were lowered 10 feet. The next line marks the depth of 20 feet, and so on with the succeeding lines. The space between any line and that next inside it indicates the distance required for the depth of the water to increase 10 feet. The lines, therefore, indicate the slope of the bottom. Where they are close together the slope is steep, where they are far apart the slope is correspondingly gradual. It will be seen that the lake consists of two basins. The northern and smaller one slopes gradually to a depth of 42.6 feet, while the bottom of the southern and larger basin slopes steeply to a depth of over 100 feet.

In order to make plainer the shape of the lake basin, the depth of the water has been indicated by a blue color printed in four tints. The shoaler water to a depth of 10 feet has the lightest tint; the second tint indicates the depth from 10 to 40 feet; the third, from 40 to 70 feet; and the deepest tint is given to the deep water below 70 feet in the southern basin.

In the sections of the lake the horizontal scale is the same as that of the map, but the vertical scale has been magnified three times. This enlargement of the vertical scale necessarily exaggerates the steepness of the slope of the shores in the same proportion.

The most remarkable structural feature of the bottom of the lake is the shoal in the southern basin near its western shore. As the map shows, this is a narrow ridge more than one-fourth of a mile in length, whose crest is only about 5 feet below the surface. There is a depth of 45 feet of water between the shoal and the nearer shore, while on the outside, it slopes down very steeply to a depth of more than 100 feet. The hills in the neighborhood of the lake reach a height of more than 200 feet. A dam at the outlet raises the level of the lake about 18 inches.

HYDROGRAPHIC MAP
OF
BIG CEDAR LAKE, WISCONSIN
WASHINGTON CO.

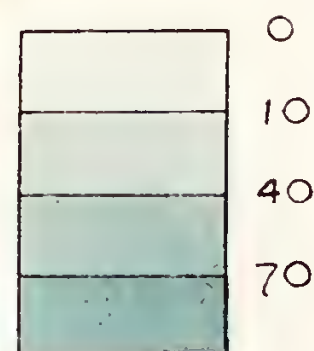
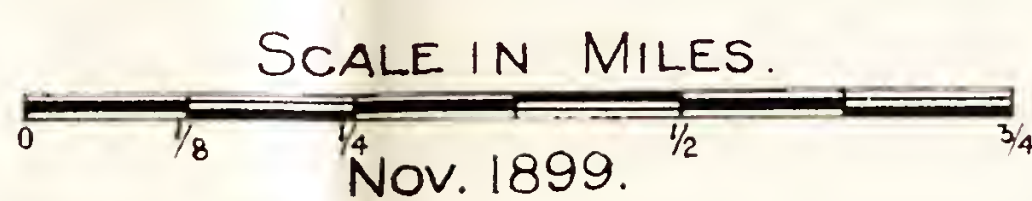
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WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY

E. A. BIRGE, PH.D. DIRECTOR.

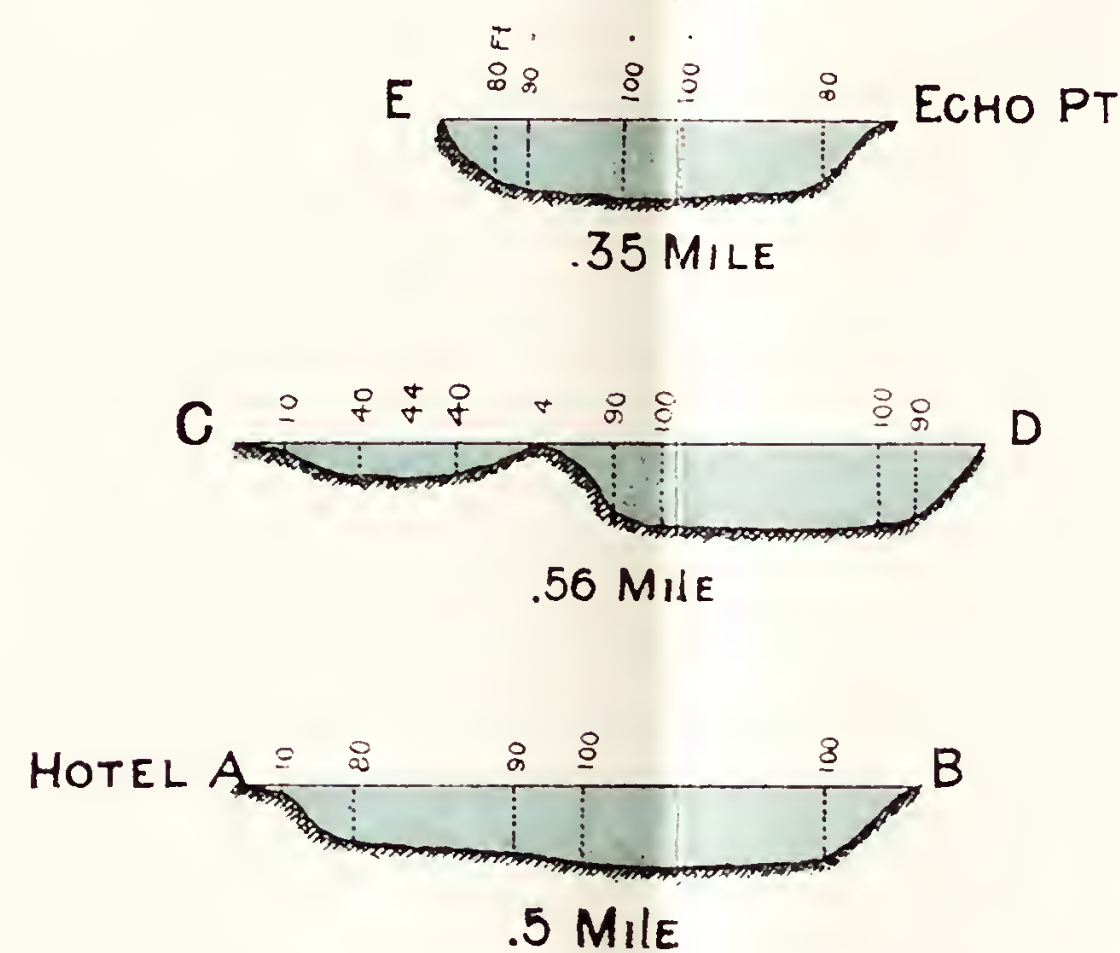
Hydrography in charge of L. S. Smith, C.E.

Contour Interval = 10 Ft.



Note: THE HORIZONTAL SCALE OF THE CROSS-SECTIONS IS THE SAME AS THE MAP, BUT THE VERTICAL SCALE HAS BEEN MAGNIFIED THREE TIMES.

Cross Sections



Area of Lake
948 Acres.

Section Along Axis of Lake. 3.9 Miles.

Range 18 E.
Range 19 E.

